

Tank Waste Committee

Date: Wednesday, March 12, 2014

Time: 9:00 a.m. to 4:00 p.m.

Location: Richland Library Conference Rooms A/B, 955 Northgate Drive, Richland WA

Call-in: Conference Call Instructions:

- Tri-City participants: 376-3622, conference code **6534566#**
- Long distance participants: 1-877-401-5229, conference code **6534566#**

GoToMeeting: <https://www3.gotomeeting.com/join/390029886>; Meeting ID: 390-029-886

9:00 a.m. Opening – Dirk Dunning, Chair

- Welcome and introductions
- Approval of the February committee meeting summary
- Announcements

9:15 a.m. “Glass 101” Tutorial

Purpose: To gain a basic understanding of glass and the glass process used at the Waste Treatment Plant (WTP), and discuss key issues and controlling factors.

- Introduction: Bob Suyama (5 min)
- Agency Presentation: Albert Kruger, DOE-ORP¹ (60 min)
 - *How does glass chemistry work (e.g. viscosity, melt temperature)?*
 - *What is the vitrification “glassification” process? How does it work?*
 - *What happens to technetium-99, cesium-137/134, iodine-129, sulfate, carbon-14, iron, chromium, nitrate, sodium, water and other key constituents?*
 - *What does the product glass actually look like? How does it compare to the glasses we use every day? How is the glass tested and approved?*
 - *How do different glass chemistries compare? What are the differences between the aluminum borosilicate glasses planned for use at WTP? And how do these differ from other glass chemistries (e.g. iron phosphate, or others)? What are the relative advantages, disadvantages and characteristics of each? How mature is each?*
 - *How are volatilized constituents dealt with? What ultimately happens to them?*

¹ U.S. Department of Energy – Office of River Protection

- *How does the glass behave over time? How does it age? How might it release the radioactive and chemical constituents? What does that mean for performance?*
- *What upsets to the system could happen (in the plant)? What might the consequences be?*
- Regulator Perspective: Suzanne Dahl, Ecology² (10 min)
- Committee discussion

11:15 a.m. Break

11:30 a.m. Committee Business (Part 1)

- Committee leadership selection (10 min)
- Discuss [DOE response to HAB Advice #271 Leaking Tanks](#) and [Ecology response](#) and [DOE response](#) to HAB Advice #273 Openness and Transparency Related to Tank Waste Treatment (20 min)

12:00 p.m. Lunch

1:15 p.m. DOE Framework Topic Briefing: Tank Waste Characterization and Staging

Purpose: To learn about what is being proposed for tank waste characterization and staging.

- Introduction: Liz Mattson (5 min)
- Agency Presentation: Isabelle Wheeler, DOE-ORP (30 min)
- Regulator Perspective: Suzanne Dahl, Ecology (10 min)
- Committee discussion

2:45 p.m. Break

3:00 p.m. Committee Business (Part 2)

- Review follow-up items
- Update the 3-Month Work Plan (25 min)
- Develop the April Potential Meeting Topics Table (30 min)
- Review follow up items (5 min)

4:00 p.m. Adjourn

² Washington State Department of Ecology